

In the Claims:

Cancel claims 73, 88, 98, 108, 114, 117, 119, 148, 155, 429 and 430 without estoppel or disclaimer of the subject matter thereof. Amend claims 70, 71, 75, 77, 80, 82, 85, 91, 94, 104, 105, 107, 134, 137, 152, 161, 431, and 433, as follows:

1-69. (Cancelled)

70. (Currently Amended) A method of locating a graft assembly including a blood flow conduit in relation to an arteriotomy defined in a side wall of a blood vessel, with the graft assembly including ~~(i) a graft having an orifice~~ ~~;~~ ~~and (ii) a~~ at an end of the blood flow conduit and a flange portion at the end of the blood flow conduit extending radially about the orifice, the method comprising the steps of:

extravascularly aligning the orifice of the graft assembly with the arteriotomy; and

locating the flange portion within the blood vessel against an interior wall with the blood flow conduit of the graft assembly extending outwardly through the arteriotomy away from the blood vessel ~~defined therein~~.

71. (Currently Amended) The method of claim 70 including a plurality of arms integrally positioned within the flange portion against an interior wall with at least a portion of each of the arms extending through the arteriotomy away from the blood vessel.

72.-74. (Cancelled)

75. (Currently Amended) A method of locating a graft assembly including a blood flow conduit in relation to an arteriotomy defined in a side wall of a blood vessel, with the graft assembly including (i) ~~a graft having~~ an orifice at an end of the blood flow conduit, and (ii) a plurality of arms attached to the ~~graft~~ blood flow conduit at the end thereof and extending away from the orifice ~~of the graft~~, the method comprising the steps of:

locating the graft assembly within a delivery device;

extravascularly advancing the delivery device toward the arteriotomy while the graft assembly is located within the delivery device;

aligning the orifice ~~of the graft~~ at the end of the blood flow conduit with the arteriotomy; and

locating the plurality of arms within the blood vessel with a portion of each of the arms extending away from the blood vessel through the arteriotomy defined in the side wall of the blood vessel;

wherein each of the plurality of arms is located in a first position in relation to the graft assembly during the advancing step, and

wherein each of the plurality of arms moves from the first position to a second position in which a portion of each of the arms extends inside the blood vessel away from the arteriotomy defined therein after the advancing step.

76. (Original) The method of claim 75, wherein each of the plurality of arms moves from the first position to the second position due to spring action.

77. (Currently Amended) The method of claim 75 wherein the plurality of arms includes ~~at least~~ four (4) arms or a number of arms other than four extending away from the orifice of the graft.

78. (Original) The method of claim 75, wherein each of the plurality of arms is maintained in the first position by an inner wall of the delivery device.

79. (Cancelled)

80. (Currently Amended) A method of locating a graft assembly including a blood flow conduit in relation to an arteriotomy defined in a side wall of a blood vessel, with the graft assembly including ~~a graft having~~ an orifice at an end ~~thereof~~ of the blood flow conduit and a resilient support secured thereto about the orifice, the method comprising the steps of:

locating the graft assembly and resilient support within a delivery device;  
extravascularly advancing the delivery device toward alignment with the arteriotomy with the graft assembly and resilient support located within the delivery device; and

removing the graft assembly and resilient support from the delivery device through the arteriotomy into the blood vessel ~~device~~ after the advancing step;

wherein the resilient support is maintained in a first configuration during the advancing step; and

wherein the resilient support moves from the first configuration to a second configuration extending outwardly about the ~~arteriotomy~~ orifice inside the blood vessel due to spring action with the blood flow conduit extending through the arteriotomy away from the blood vessel after the removing step.

81. (Previously Presented) The method of claim 80, wherein after the removing step:

a first portion of the resilient support is located adjacent to an interior sidewall of the blood vessel with the resilient support positioned in the second configuration.

82. (Currently Amended) A method of locating a graft assembly in relation to an arteriotomy defined in a blood vessel, with the graft assembly including a graft and a resilient support secured thereto, the method comprising the steps of:

locating the graft within a delivery device;  
extravascularly advancing the delivery device toward the arteriotomy while the graft is located within the delivery device; and

removing the graft from the delivery device after the advancing step;

wherein the resilient support is maintained in a first configuration during

the advancing step,

wherein the resilient support moves from the first configuration to a second expanded configuration due to spring action after the advancing step, and

wherein after the removing step:

a first portion of the resilient support is located adjacent to an interior sidewall of the blood vessel with the resilient support positioned in the second configuration, and a second portion of the resilient support extends through the arteriotomy in a direction away from the blood vessel with the resilient support positioned in the second configuration.

83. (Cancelled)

84. (Previously Presented) The method of claim 82, wherein after the removing step:

all of the first portion is located inside of the blood vessel, and

all of the second portion is located outside of the blood vessel.

85. (Currently Amended) The method of claim 80, wherein:

the graft assembly further includes a flange portion disposed about the orifice at said end, and

at least some of the resilient support is positioned in contact with the flange portion.

86. (Original) The method of claim 85, wherein the at least some of the resilient support is integrally positioned within the flange portion.

87.-89. (Cancelled)

90. (Original) The method of claim 80, wherein the resilient support includes a plurality of spring arms.

91. (Currently Amended) The method of claim 90, wherein the plurality of spring arms includes ~~at least four~~ ~~(4)~~ spring arms or a number of spring arms other than four.

92. (Previously Presented) The method of claim 80, wherein the resilient support is maintained in the first configuration due to physical interaction with an inner wall of the delivery device.

93. (Currently Amended) The method of claim 80, further comprising the step of inhibiting movement of the blood flow conduit of the graft assembly in a direction outwardly through the arteriotomy and away from the blood vessel with the resilient support positioned in the second configuration.

94. (Currently Amended) A method of placing a graft assembly including a blood flow conduit in relation to an arteriotomy defined in a sidewall of a blood vessel, with the graft assembly including ~~a graft having~~ an orifice at an end ~~thereof~~ of the blood flow conduit and a plurality of spring arms extending away from the orifice, the method comprising the steps of:

extravascularly aligning the orifice of the graft assembly with the arteriotomy; and

locating the plurality of spring arms through the arteriotomy with portions thereof adjacent to an inside wall of the blood vessel and with the blood flow conduit extending through the arteriotomy away from the blood vessel.

95. (Cancelled)

96. (Previously Presented) The method of claim 94, wherein other portions of the plurality of spring arms extend through the arteriotomy and are located outside of the blood vessel after the locating step.

97.-100 (Cancelled)

101. (Previously Presented) The method of claim 94, wherein:

the graft assembly further includes a flange portion disposed about the orifice, and

each of the plurality of spring arms is positioned in contact with the flange portion.

102. (Previously Presented) The method of claim 101, wherein at least a portion of each of the plurality of spring arms is integrally positioned within the flange portion, and another portion of each of the plurality of spring arms extends through the arteriotomy away from the blood vessel.

103. (Cancelled)

104. (Currently Amended) The method of claim 94, further comprising the steps of:

prior to the aligning step, locating the graft assembly within a delivery device; and

extravascularly advancing the delivery device toward alignment with the arteriotomy while the graft assembly is located within the delivery device,

wherein each of the plurality of spring arms is confined within the delivery device during the advancing step, and

wherein each of the plurality of spring arms moves to an expanded condition extending about the arteriotomy in orifice of the graft within the blood vessel after the advancing step.

105. (Currently Amended) The method of claim 94, wherein the plurality of spring arms includes ~~at least four~~ four (4) spring arms or a number of spring arms other than four.

106. (Previously Presented) The method of claim 104, wherein each of the plurality of spring arms is maintained in the confined position due to physical interaction with an inner wall of the delivery device.

107. (Currently Amended) The method of claim 94, further comprising the step of inhibiting movement of the graft assembly in a direction outwardly through



the arteriotomy and away from the blood vessel due to physical interaction of portions of the plurality of spring arms against an interior wall of the blood vessel.

108. (Cancelled)

109. (Previously Presented) An anastomosis method for placing a conduit assembly adjacent to an arteriotomy defined in a blood vessel, wherein the conduit assembly includes a blood flow conduit and a resilient member secured about an orifice at an end of the blood flow conduit, the method comprising:

(i) extravascularly aligning the orifice of the blood flow conduit with the arteriotomy, (ii) locating a first portion of the resilient member within the blood vessel, and (iii) locating a second portion of the resilient member extending through the arteriotomy outside of the blood vessel; and

wherein locating the first portion includes the steps of:

confining the resilient member to a first configuration;

advancing the first portion of the resilient member through the arteriotomy while the resilient member is confined in the first configuration; and

expanding the resilient member from the confined first configuration to a second expanded configuration about the arteriotomy within the blood vessel due to spring action after the advancing step.

110.-120. (Cancelled)

121. (Previously Presented) A method of positioning a conduit assembly in relation to an arteriotomy in a blood vessel, with the conduit assembly including a blood flow conduit and a strut assembly secured thereto about an orifice at an end thereof, comprising the steps of:

confining the blood flow conduit within an interior space of a delivery device;

extravascularly advancing a distal end of the delivery device through the arteriotomy with the blood flow conduit confined within the interior space of the delivery device; and

after the advancing step, configuring the strut assembly within the blood vessel to a second configuration with the strut assembly extending within the blood vessel about the arteriotomy and with the blood-flow conduit extending outwardly through the arteriotomy away from the blood vessel.

122. (Original) The method of claim 121, wherein the strut assembly includes a plurality of struts.

123. (Previously Presented) The method of claim 122, wherein each of the plurality of struts extend radially outwardly from the orifice of the blood flow conduit with the strut assembly positioned in the second configuration and with the orifice of the blood flow conduit aligned with the arteriotomy.

124. (Cancelled)

125. (Previously Presented) The method of claim 122, further comprising the step of positioning each of the plurality of struts adjacent to an interior wall of the blood vessel and extending away from the arteriotomy after the advancing step.

126. (Cancelled)

127. (Previously Presented) The method of claim 122, wherein a portion of each of the plurality of struts extends through the arteriotomy and is located outside of the blood vessel after the positioning step.

128. (Cancelled)

129. (Previously Presented) The method of claim 122, wherein:  
the conduit assembly further includes a flange portion secured to the blood flow conduit near an end thereof adjacent the strut assembly, and  
each of the plurality of struts is positioned in contact with the flange portion.

130. (Previously Presented) The method of claim 129, wherein at least a part of each of the plurality of struts is integrally positioned within the flange portion.

131. (Previously Presented) The method of claim 121, wherein the arteriotomy is in an aorta.

132. (Previously Presented) The method of claim 121, wherein the blood flow conduit is a synthetic graft.

133. (Previously Presented) The method of claim 121, wherein the strut assembly moves from the confined configuration to the second configuration due to spring action.

134. (Currently Amended) The method of claim 122, wherein the plurality of struts includes ~~at least four (4)~~ struts or a number of struts other than four.

135. (Cancelled)

136. (Previously Presented) The method of claim 121, further comprising the step of inhibiting movement of the blood flow conduit in a direction away from the arteriotomy in the blood vessel due to physical interaction between the strut assembly and the blood vessel with the strut assembly in the second configuration.

137. (Currently Amended) A method of locating a conduit assembly in relation to an opening defined in a sidewall of a blood vessel, with the conduit assembly including a blood flow conduit having a flange portion and a plurality of struts attached thereto about an orifice at an end thereof, the method comprising the steps of:

advancing the flange portion and plurality of struts into the blood vessel through the opening; and

aligning the orifice of the blood flow conduit with the opening defined in the blood vessel, with the flange portion and each of the plurality of struts attached thereto extending inside the blood vessel about the opening defined therein and

with the blood flow conduit extending through the opening away from the blood vessel.

138. (Original) The method of claim 137, further comprising the step of locating the plurality of struts adjacent to an interior wall of the blood vessel.

139. (Original) The method of claim 138, further comprising the step of urging each of the plurality of struts against the interior wall of the blood vessel.

140. (Previously Presented) A method of locating a conduit assembly in relation to an opening defined in a blood vessel, with the conduit assembly including a blood flow conduit and a plurality of struts, comprising the steps of:

advancing the plurality of struts into the blood vessel through the opening;

aligning an orifice of the blood flow conduit with the opening defined in the blood vessel;

urging each of the plurality of struts against the interior wall of the blood vessel, wherein the urging step includes a step of placing a stent within the blood vessel and adjacent to the plurality of struts to urge the struts against the interior wall of the blood vessel.

141. (Cancelled)

142. (Previously Presented) A method of locating a conduit assembly in relation to an opening defined in a sidewall of a blood vessel, with the conduit

assembly including a blood flow conduit and a plurality of struts, the method comprising the steps of:

locating the blood flow conduit within a delivery device;

extravascularly moving the delivery device toward the opening defined in the blood vessel with the blood flow conduit located within the delivery device and each of the plurality of struts located in a first physical arrangement confined within the delivery device;

advancing the plurality of struts into the blood vessel through the opening;

aligning an orifice of the blood flow conduit with the opening defined in the blood vessel; and

reconfiguring each of the plurality of struts from the first physical arrangement to a second physical arrangement extending within the blood vessel about the opening therein, with the blood flow conduit extending through the opening for conducting blood flow away from the blood vessel.

143. (Original) The method of claim 142, wherein each of the plurality of struts moves from the first physical arrangement to the second physical arrangement due to spring action.

144.-145. (Cancelled)

146. (Previously Presented) The method of claim 137, wherein each of the plurality of struts is integrally positioned within the flange portion.

147.-151. (Cancelled)

152. (Currently Amended) The method of claim 137, further comprising the step of inhibiting movement of the blood flow conduit in a direction away from the blood vessel due to physical interaction between the plurality of struts and an inner wall of the blood vessel about the opening therein.

153. (Previously Presented) A method of placing a conduit assembly adjacent to an arteriotomy defined in a blood vessel, the conduit assembly including a blood flow conduit and a resilient support secured thereto near any end thereof, the method comprising the steps of:

confining the resilient support in a first configuration,

extravascularly advancing the resilient support and partially through the arteriotomy with the resilient support in the first configuration, and with the blood flow conduit extending through the arteriotomy away from the blood vessel; and

after the advancing step, releasing the resilient support to move from the first configuration to a second configuration extending about the arteriotomy inside the blood vessel due to spring action of the resilient support.

154.-155. (Cancelled)

156. (Previously Presented) The method of claim 153, wherein:

the conduit assembly further includes a flange portion secured to the blood flow conduit near the end thereof;

the resilient support includes at least one arm; and

the at least one arm is positioned in contact with the flange portion to urge the flange portion into contact with an interior wall of the blood vessel.

157. (Original) The method of claim 156, wherein at least one arm is integrally positioned within the flange portion.

158. (Cancelled)

159. (Previously Presented) The method of claim 153, further comprising the steps of:

prior to the advancing step, locating the blood flow conduit and resilient support within a delivery device; and

extravascularly advancing the delivery device toward the arteriotomy in alignment therewith while the blood flow conduit and resilient support are located within the delivery device.

160. (Original) The method of claim 153, wherein the resilient support includes a plurality of arms.

161. (Currently Amended) The method of claim 160, wherein the plurality of arms includes ~~at least four~~ ~~(4)~~ arms or a number of arms other than four which are spaced apart from each other.



162. (Previously Presented) The method of claim 159, wherein the resilient support member is confined in the first configuration by physical interaction with an inner wall of the delivery device.

163. (Cancelled)

164. (Previously Presented) The method of claim 436, wherein:  
the first portion of the resilient support is positioned within the blood vessel, and

the second portion of the resilient support is positioned outside of the blood vessel.

165. (Original) The method of claim 164, wherein the first portion of the resilient support includes a plurality of support arms.

166. (Previously Presented) The method of claim 153, further comprising the step of inhibiting movement of the blood flow conduit through the arteriotomy in a direction away from the blood vessel due to physical interaction between the resilient support and the blood vessel after the releasing step.

167-424. (Cancelled)

425. (Previously Presented) A method of locating a graft assembly in relation to an aortotomy with the graft assembly including (i) a graft having an orifice; and (ii) a plurality of arms extending away from the orifice of the graft, and

(iii) a flange portion, with each of the plurality of arms positioned in contact with the flange portion, the method comprising the steps of:

aligning the orifice of the graft assembly with the aortotomy; and

locating the plurality of arms within the aorta.

426. (Previously Presented) A method of locating a graft assembly in relation to an arteriotomy defined in a blood vessel, with the graft assembly including a graft and a resilient support secured thereto, the method comprising the steps of:

locating the graft within a delivery device;

advancing the delivery device toward the arteriotomy while the graft is located within the delivery device in a first configuration; and

removing the graft from the delivery device after the advancing step to move the resilient support from the first configuration to a second configuration due to spring action, with some of a first portion of the resilient support located adjacent to a sidewall within the blood vessel, and with some of a second portion of the resilient support located outside the blood vessel and extending in a direction away from the blood vessel.

427. (Previously Presented) A method of locating a graft assembly in relation to an aortotomy with the graft assembly including a graft and a resilient support secured thereto, the method comprising the steps of:

locating the graft within a delivery device;

advancing the delivery device toward the aortotomy while the graft is located within the delivery device; and

removing the graft from the delivery device after the advancing step, wherein the resilient support is maintained in a first configuration during the advancing step, and

wherein the resilient support moves from the first configuration to a second configuration due to spring action after the advancing step.

428. (Previously Presented) A method of locating a graft assembly in relation to an arteriotomy defined in a blood vessel, with the graft assembly including a graft and a resilient support secured thereto, the method comprising the steps of:

locating the graft within a delivery device;

advancing the delivery device toward the arteriotomy while the graft is located within the delivery device in a first configuration; and

removing the graft from the delivery device after the advancing step to move the resilient support from the first configuration to a second configuration due to spring action, with a first portion of the resilient support located adjacent to a sidewall of the blood vessel, and with a second portion of the resilient support extending radially away from an orifice of the graft.

429.-430. (Cancelled)

431. (Currently Amended) A method of locating a conduit assembly in relation to an opening defined in a sidewall of a blood vessel, with the conduit assembly including a blood flow conduit and a plurality of struts positioned in contact with a flange portion having an orifice therein at an end of the blood flow conduit, the method comprising the steps of:

advancing the plurality of struts and flange portion into the blood vessel through the opening to locate the plurality of struts and flange portion adjacent to an interior wall of the blood vessel; and

aligning ~~an~~ the orifice of the blood flow conduit with the opening defined in the blood vessel to position each of the plurality of struts to extend radially away from the opening defined in the blood vessel, ~~wherein the conduit assembly further includes a flange portion and each of the plurality of struts positioned in contact with the flange portion.~~

432. (Previously Presented) A method of locating a conduit assembly in relation to an aortotomy with the conduit assembly including a blood flow conduit and a plurality of struts and a flange portion, the method comprising the steps of:

advancing the plurality of struts into the aorta through the aortotomy; and

aligning an orifice of the blood flow conduit with the aortotomy defined in the aorta, with each of the plurality of struts positioned in contact with the flange

portion.

433. (Currently Amended) A method of locating a conduit assembly in relation to an opening defined in a sidewall of a blood vessel, with the conduit assembly including a blood flow conduit having an orifice at an end and a flange portion extending radially about the orifice, the method comprising the steps of:

advancing the flange portion into the blood vessel through the opening;  
and

aligning an orifice of the blood flow conduit with the opening defined in the blood vessel with the flange portion disposed inside the blood vessel against the side wall and extending radially away from the opening in the blood vessel with orifice of the blood flow conduit extending through the opening away from the blood vessel.

434. (Previously Presented) A method of placing a conduit assembly adjacent to an aortotomy, the conduit assembly including a blood flow conduit and a resilient support secured thereto, the method comprising the steps of:

bending the resilient support into a first configuration;  
advancing the resilient support partially through the aortotomy while the resilient support is in the first configuration; and  
allowing the resilient support to move from the first configuration to a second configuration due to spring action after the advancing step.

435. (Previously Presented) A method of placing a conduit assembly adjacent to an arteriotomy defined in a blood vessel, the conduit assembly including a blood flow conduit having an orifice and a resilient support secured thereto, the method comprising the steps of:

bending the resilient support into a first configuration;

advancing the resilient support partially through the arteriotomy while the resilient member is in the first configuration; and

after the advancing step, allowing the resilient support to move from the first configuration to a second configuration due to spring action with the resilient support extending radially away from the orifice of the blood flow conduit.

436. (Previously Presented) A method of placing a conduit assembly adjacent to an arteriotomy defined in a blood vessel, the conduit assembly including a blood flow conduit and a resilient support secured thereto, the method comprising the steps of:

bending the resilient support into a first configuration;

advancing the resilient support partially through the arteriotomy while the resilient support is in the first configuration; and

after the advancing step, allowing the resilient support to move from the first configuration to a second configuration due to spring action while a first portion of the resilient support is positioned on a first side of the arteriotomy and a

second portion of the resilient support is positioned on a second side of the arteriotomy.